



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,683	05/22/2004	Johan Ockborn	07589.0176.PCUS00	3047
28694	7590	10/25/2006		
NOVAK DRUCE & QUIGG, LLP 1300 EYE STREET NW 400 EAST TOWER WASHINGTON, DC 20005			EXAMINER JIMENEZ, MARC QUEMUEL	
			ART UNIT 3726	PAPER NUMBER

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/709,683	Applicant(s) OCKBORN ET AL.	
	Examiner Marc Jimenez	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-3, 5-7 and 10-15** are rejected under 35 U.S.C. 102(b) as being anticipated by Dimberg (US1641745).

Dimberg teaches a method for manufacturing a stator or rotor component by joining at least one blade **2** together with at least one ring element **3**, the method comprising: providing a joining material **9** between (page 2, lines 75-80) the at least one of the blade **2** and the ring element **3**, the blade **2** and the ring element **3** being arranged in relation to one another to be joined together via a butt joint during a heat treatment (page 2, lines 39-40); and conducting the heat-treatment so that the joining material **9** forms a melt that joins the ring element **3** and the blade **2** together upon solidification of the melt **9**.

Regarding claim 2, the blades **2** are joined with the ring element **3** at a mutual spacing about a periphery of the ring element **3**.

Regarding claim 3, the ring **3** is continuous.

Regarding claim 5, the ring element **3** forms an outer ring and the blades **2** are joined together with the outer ring **3** in such a way that the blades **2** project inward in the radial direction from the ring element **3**.

Regarding claim 6, the ring **4** could be considered the ring element. The ring element **4** therefore forms an inner ring and the blades **2** are joined together with the inner ring **4** in such a way that the blades **2** project outward in the radial direction from the ring element **4**.

Regarding claim 7, the ring element **3** is joined with an annular member further comprising a plurality of blades **2** projecting radially, a first of the ring element **3** and annular member is designed with a radially inner surface that is at least partially angled (0 degrees and 90 degrees are angles) in relation to a central axis thereof and a radially outer surface of a second of the ring element **3** and the annular member has essentially corresponding angled shape, and the ring element and the annular member are connected via relative axial movement therebetween when the angled surfaces are brought into mutual contact.

Regarding claims 10 and 12, the joining material **9** is provided in the form of a continuous layer.

Regarding claim 11, the joining material **9** is applied to a surface of the ring element before the ring element and blades are joined together (page 2, lines 28-35).

Regarding claim 13, the joining material **9** is considered a film coating.

Regarding claim 14, the pressure is applied by clamping (page 2, lines 34-39).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dimberg (US1641745) in view of Doran (US2347034).

Dimberg teaches the invention cited above with the exception of the ring elements joined together in a peripheral direction thereby forming a continuous ring.

Doran teaches ring elements **15,16** joined together in a peripheral direction thereby forming a continuous ring.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Dimberg with ring elements joined together in a peripheral direction thereby forming a continuous ring, in light of the teachings of Doran, in order to provide a ring portions that can easily be removed or repaired in sections.

5. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dimberg in view of Gilson (US1286283).

Dimberg teaches the invention cited above with the exception of the angle being conically shaped.

Gilson teaches that it is known to create angled surfaces that are conically shaped (figure

Art Unit: 3726

6.).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Dimberg with a conically shaped angle, in light of the teachings of Gilson, in order to provide a blade configuration having the desired air thrust produced due to the configuration of the blades.

6. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dimberg in view of Gilson as applied to claim 8 above, and further in view of Schenk (US2633776).

Dimberg/Gilson teach the invention cited above with the exception of the blades being milled out from a basic piece.

Schenk teaches milling from a basic piece (figure 1).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Dimberg/Gilson with milling from a basic piece, in light of the teachings of Schenk, in order to create accurately shaped blades.

Response to Arguments

7. Applicant's arguments filed 10-3-06 have been fully considered but they are not persuasive.

8. Applicant states on page 7 of the arguments that Dimberg teaches with regard to feature 9, Dimberg teaches that this is “a base strip clamping plate” and refers to page 1, lines 101-102. However, page 1, lines 101-102 of the Dimberg reference does not describe a base strip as being reference numeral 9. On page 2, line 12, Dimberg calls reference numeral 9 a “soldering

Art Unit: 3726

material”. Applicant also argues that the office action fails to show how a joint between a blade and a shroud strip could involve the base strip clamping plate 9 according to the teachings of Dimberg. This argument is not understood since reference numeral 9 refers to a “soldering material” in Dimberg.

9. Applicant argues that there is no butt joint in Dimberg, however, the contact face of the blade 2 to the ring 3 creates a butt joint.

10. Applicant argues the claims have been amended so that placement of the joining or bonding material is between the blade and the ring element and occurs before conducting heat treatment. Applicant further argues that Dimberg does not teach this new limitation. However, Dimberg clearly places a joining or bonding material by dipping the ends of the blades in solder. On page 2, lines 78-84, Dimberg teaches “It may in some cases be desirable to dip the ends or other portions of the blades 2 located adjacent to the final joints, in solder, either in substitution of coating strips, or in addition thereto, ...”.

11. Applicant also argues that it is well known to one of ordinary skill in the art that the processes of soldering or brazing require pre-heating of elements before application of material to permanently join them together. However, Dimberg also suggests applying the solder material before heating on page 2, lines 78-84.

12. Applicant argues that Dimberg includes additional processing steps not claimed. However, the claims are written in open ended format with the clause “comprising” and therefore does not preclude additional features.

13. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., “single heat

treatment”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

14. Applicant's arguments with respect to claim 15 fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Interviews After Final

16. Applicant note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview is presented briefly, in writing (the agenda of the interview must be in writing) to clarify issues for appeal requiring only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations will be denied. See MPEP 714.13 and 713.09.

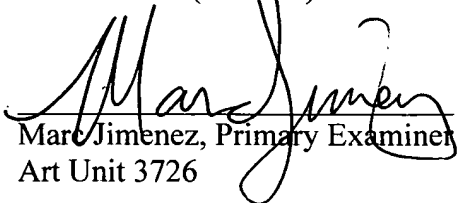
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is (571) 272-4530. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

Art Unit: 3726

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Marc Jimenez, Primary Examiner
Art Unit 3726

MJ

3-28-06